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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/774,056	02/06/2004	Gerold Balling	BALLING	4816

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EXAMINER
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SHECHTMAN, SEAN P

ART UNIT	PAPER NUMBER
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2125

DATE MAILED: 04/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/774,056

Applicant(s)

BALLING, GEROLD

Examiner

Sean P. Shechtman

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4, 6, 7 and 9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6, 7 and 9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 April 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>4/7/05</u> .  | 6) <input type="checkbox"/> Other: _____                                    |

### **DETAILED ACTION**

1. Claims 1-4, 6, 7, and 9 are presented for examination. Claims 1, 6 and 7 have been amended. Claims 5 and 8 have been cancelled.

#### ***Drawings***

2. The drawings are objected to under 37 CFR 1.84(h)(5) because Figure 1 show(s) modified forms of construction in the same view. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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3. Claims 1-4, 6, 7, and 9 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The application as originally filed, fails to provide for the “thin client” now claimed by applicant. Clearly, the term thin client is of broader scope than the term “ultrathinclient”, and the examiner respectfully submits that this broader scope was not present in the application as originally filed. Disclosure in an application that merely renders the later-claimed invention obvious is not sufficient to meet the written description requirements of 35 U.S.C 112, first paragraph. *Lockwood, v. American Airlines, Inc.* 41 U.S.P.Q.2d. 1961, 1966 (Fed. Cir. 1997).

***Claim Rejections - 35 USC § 102***

4. Rejection withdrawn due to the amendment.

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 1, 7, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP0519076A1 to Kanda.

Referring to claims 1, 7, and 9, Kanda teaches a device for controlling *at least one* machine tool or production machine (Title; Col. 1, line 57 – Col. 2, line 3), comprising:

hand-held devices located remote from the *at least one* machine tool or production machine and including control functions for controlling the at least one machine tool or

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production machine (Col. 1, line 30- Col. 2, line 3; Col. 1, line 21-29);

a thin client included in the at least one machine tool or production machine for converting control input from the handheld device into bus telegrams (Col. 4, lines 45-49; Col. 5, lines 4-10), said thin client lacking built-in intelligence (Col. 1, line 50 – Col. 2, line 3, the numerical control system with display is operated manually by the portable wireless manual operating equipment); and

at least one bus system connecting the handheld device with the thin client to transmit data and control signals unidirectionally or bidirectionally (Col. 4, lines 36-37; Col. 4, line 45 – Col. 5, line 25; Col. 1, line 50 – Col. 2, line 3).

The claims, as such, do not require that the control input or control signals be for controlling the tools or machines, or controlling the selection of the tools or machines, or controlling any particular claimed element.

Kanda teaches all of the elements above, and furthermore, Kanda does not teach that the display of the numerical control system has built-in intelligence, in fact Kanda teaches manually operating the numerical control system by employing the portable and wireless manual operating equipment (Col. 1, line 30 – Col. 2, line 3). However, Kanda fails to teach that the manually operated numerical control system does not have built-in intelligence.

However, it would have been obvious to one of ordinary skill in the art at the time that the invention was made to omit any such intelligence from the numerical control system of Kanda, even though built-in intelligence is not necessarily even there, since it has been held that omission of an element and its function in a combination where the remaining elements perform the same functions as before involves only routine skill in the art. *In re Karlson*, 136 USPQ 184.

One of ordinary skill in the art would have been motivated to not have built-in intelligence in the numerical control system of Kanda because it would be economically efficient since the numerical control system is already being operated manually. Furthermore, it would eliminate the maintenance associated with lifespan/damage of intelligence built-in to the numerical control system, if it were built-in.

6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over EP0519076A1 to Kanda as applied to claims 1, 7, and 9 above, and further in view of U.S. Pat. No. 5,561,770 to de Bruijn.

Referring to claim 2, Kanda teaches all of the limitations set forth above, however fails to teach the bus system is configured as a redundant and secure bus system.

However, referring to claim 2, de Bruijn teaches analogous art (Col. 1, lines 17-27), wherein the bus system is configured as a redundant and secure bus system (Abstract).

Therefore, it would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify the teachings of Kanda with the teachings of de Bruijn. One of ordinary skill in the art would have been motivated to combine these references because de Bruijn teaches a secure communication system which enables an actively redundant process control computer to receive a revised operating program without adversely affecting the operation of another actively redundant process control computer (Col. 2, lines 38-64). Furthermore, de Bruijn teaches a communications system capable of utilizing a plurality of different communication protocols and encryptions techniques depending on the type of message being transmitted (Col. 2, lines 59-64).

7. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over EP0519076A1 to Kanda as applied to claims 1, 7, and 9 above, and further in view of The Microsoft Computer Dictionary.

Referring to claim 3, Kanda teaches all of the limitations set forth above, however fails to teach the bus system is implemented at an Ethernet bus system.

However, referring to claim 3, The Microsoft Computer Dictionary teaches analogous art, wherein a bus system is implemented at an Ethernet bus system.

Therefore, it would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify the teachings of Kanda with the teachings of The Microsoft Computer Dictionary. One of ordinary skill in the art would have been motivated to combine these references because The Microsoft Computer Dictionary teaches the Ethernet is a widely used local area network system developed by Xerox in 1976 from which the IEEE 802.3 standard was developed, wherein this Ethernet standard provides for baseband transmission at 10 megabits per second and is available in various forms. Furthermore, The Microsoft Computer Dictionary teaches the Ethernet bus or star topology allows data to be transmitted in variable-length frames containing delivery and control information and up to 15,000 bytes of data.

8. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over EP0519076A1 to Kanda as applied to claims 1, 7, and 9 above, and further in view of U.S. Pat. No. 4,294,682 to Deczky.

Referring to claim 4, Kanda teaches all of the limitations set forth above, and further

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teaches that the bus system is a wireless bus system (Col. 1, lines 1-15) however fails to teach the bus system comprises a secure wireless connection.

However, referring to claim 4, Deczky teaches analogous art, wherein the bus system comprises a secure wireless connection (Abstract).

Therefore, it would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify the teachings of Kanda with the teachings of Deczky. One of ordinary skill in the art would have been motivated to combine these references because Deczky teaches a computer transmits control instructions to operators via a highly efficient optical link, thereby avoiding a great deal of electrical interference (Abstract; Col. 2, lines 8-25). This also eliminates the problems concerning a multiplicity of lengthy cables (Col. 2, lines 64-65).

9. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over EP0519076A1 to Kanda as applied to claims 1, 7, and 9 above, and further in view of U.S. Pub. No. 2003/0195642 to Ragnini.

Referring to claim 6, Kanda teaches all of the limitations discloses above, however, Kanda fails to teach that the handheld device processes the control functions of several machine tools or processing machines in parallel. The examiner respectfully notes that the several machine tools or processing machines are not even required to be the same machine tools or processing machines of claim 1. In fact, claim 1 does not even recite any limitation regarding processing machines.



However, Ragnini teaches analogous art, wherein the handheld device processes the control functions of several machine tools or processing machines in parallel (Fig. 11; page 4, paragraph 44).

Therefore, it would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify the teachings of Kanda with the teachings of Ragnini. One of ordinary skill in the art would have been motivated to combine these references because Ragnini teaches downloading of G-code programs from a Palm device to CNC machines through a legacy low-speed communication port in a harsh manufacturing environment (Page 1, paragraph 5), wherein the Palm device can operate a wide variety of multiple CNC machines having differing requirements, speeds, tolerances, and thresholds (Page 4, paragraph 44).

#### ***Response to Amendment***

10. The amendment filed April 7<sup>th</sup> 2005 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: thin client.

Applicant is required to cancel the new matter in the reply to this Office Action.

#### ***Response to Arguments***

11. Applicant's arguments with respect to claims 1-4, 6, 7, and 9 have been considered but are moot in view of the new ground(s) of rejection.

*Conclusion*

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

13. The prior art or art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patents or publications are cited to further show the state of the art with respect to a portable remote control box for CNC machines. Note the description of how the conditions of a work zone can have negative effects upon intelligence built-in to the numerical control system in column 1, lines 11-34.

U.S. Pat. No. 4,380,796 to Ostby.

The following patents or publications are cited to further show the state of the art with respect to the CNCGCODER of Ragnini.

"A Small But Powerful Tool", by Seibert, Modern Machine Shop Magazine, Gardner Publications Inc., October 2001.

"New Borders For Swiss-Type Turning", by Zelinski, Modern Machine Shop Online, Gardner Publications Inc., September 2002.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sean P. Shechtman whose telephone number is (571) 272-3754. The examiner can normally be reached on 9:30am-6:00pm, M-F.

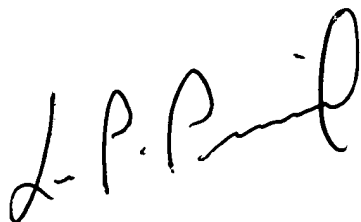
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo P. Picard can be reached on (571) 272-3749. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SPS

Sean P. Shechtman

April 26, 2005



**LEO PICARD**  
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